No.



9900276

# THE UNIVERS OF ANTERIOR

TO ALL TO WHOM THESE: PRESENTS SHALL COME:

# **IERALB** Genetics Corporation

THETERS, THERE HAS BEEN PRESENTED TO THE

# Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, FIGURE OF ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE GHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY; OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR RITING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE RURPOSE; OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT

THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'CX433RR'

In Vertinian Merces, I have hereunto set my hand and caused the seal of the Flant Anciety Protection Office to be affixed at the City of Washington, D.C. this thirtieth day of January, in the year of our Lord two thousand one.

(4) HO

Atling Commissioner Plant Variety Protection Office

Agricultural Marketing Service

giculture

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995,

(See reverse for instructions and information collection burden statement)

(Instructions and informati	on collection burden statemer	nt on reverse	A I E   1/ U.S.E. 2421)	<ol> <li>Information is held confiden</li> </ol>	until certific	cate is issued (7 U.S.C. 2426).
1 NAME OF OWNER			,			
DEK	•	Z. TEMPORARY DESIGN EXPERIMENTAL NAM	Ε	3 VARIETY NAME		
4 ADDRESS (Street and No. or R.F.O. Am. Co. State 1700)				EX842R	K	CX433RR
4 ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)				5 TELEPHONE (include :		FOR OFFICIAL USE ONLY
3100 Sycamore Road				(815) 758-928	11	PVPO NUMBER
DeKalb, IL 60115 U.S.A.				6 FAX (include area code) (815) 758-3117		9900276
7 IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF 8. IF INC.  8. IF INC.			PORATED, GIVE			FILING DATE 7 May 1999
ST		SIATEO	FINCORPORATION	9. DATE OF INCORPORA		
Corporation			elaware	June 15, 1	988	eta (1960)
10 NAME AND ADDRESS OF OWNER RE	PRESENTATIVE(S) TO SERVE IN THI	IS APPLICATION	l. (First person listed will rec	erve all papers)		FILING AND EXAMINATION
				•	- 1	FEES:
Timothy R. I	Kain		Donald Traut			
DEKALB Ge	enetics Corp.		DEKALB Constine Con			
3100 Sycam	ore Road		3100 Sycamore Road		DATE 5 - 7 - 99	
DeKalb, iL 6	0115	• .	DeKalb, IL 6011	5		E CERTIFICATION FEE:
					- 1	53d0
						DATE 11-14-00
11 TELEPHONE (Include area code)	12. FAX (Include area code)	13.	E_MAIL .	<u>-</u>	14 CPOP	KIND (Common Name)
(815) 758-9281	(815) 758-3117		tkain@del	kalb.com	1.0.0.	•
15. GENUS AND SPECIES NAME OF CROP						Soybean
•		16.	FAMILY NAME (Botanical)	AMILY NAME (Botanical)  17. IS THE VARIETY A FIRST GENERATION HYBRID?		
Glycine max			Leguminosae	Leguminosae ☐ YES XI NO		
18. CHECK APPROPRIATE BOX FOR EACH A (everse)	ATTACHMENT SUBMITTED (Follow in	structions on	19. DOES THE OWN	NER SPECIFY THAT SEED O	F THIS VARI	ETY BE SOLD AS A CLASS OF
a. X Exhibit A. Origin and Breeding H			☐ YES	Section (S(a) of the Plant Vanety Protection Act)		
b. X Exhibit B. Statement of Distinction C. X Exhibit C. Objective Description of		• .	and 21 below) X NO (If "no," go to item 22)			
d. Exhibit D. Additional Description		.*	20. DOES THE OWN OF GENERATIO	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?		
e. X Exhibit E. Statement of the Basis	of the Owner's Ownership		☐ YES			
1. V Voucher Samole (2 Son views	treated seeds or, for luber propagated be depositied and maintained in an app	variebes,				
			21 IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?  GREGISTERED CERTIFIED			
2. HAS THE VARIETY (INCLUDING ANY HARV FROM THIS VARIETY BEEN SOLD, DISPOS OTHER COUNTRIES?	ESTED MATERIAL) OR A HYBRID P	RODUCED	23, IS THE VARIETY	OR ANY COMPONENT	3 m2 1/2 m	
OTHER COUNTRIES?	CO OF INVIOLED ON USED I	IN THE U. S. OF	PROPERTY RIGH	23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?  U.S. Patent (pending)		
FYES YOU MUST PROMISE THE PROM			X YES Application No. 09/231,246 Filling Date: 1/15/99			
				SIVE COUNTRY, DATE OF FI IBER. (Please use space ind	Cated on reve	538.)
The owners declare that a viable sample of ba for a tuber propagated variety a tissue culture. The proteonics of the content of the proteonics of the content of the conten	sic seed of the variety will be furnished	d with application		<del></del>	such regulati	ons as may be applicable or
The undersigned owner(s) is(are) the owner of and is entitled to protection under the provision	this sexually reproduced or tuber pro	pagated plant va	riety, and believerst that the	ficale.		
Owner(s) is(are) informed that false representa-	s or section 42 of the Plant Vanety Pr	rolection Act. and result in ow	na#i	The state of the s	m, and scape	as required in Section 42
RATURE OF OWNER	011					<del></del>
Timothy K. K.			SIGNATURE OF OWNER			
AE (Please print or Iran)			NAME (Please print or type)			
Timothy R. Kain						
Patent Scientist	DATE 5/20	149	CAPACITY OR TITLE			DATE
0 (6-95) designed by the Plant Variety Protection	n Office with WordPerfect 6,0a. Repl	aces STD-470 (	1 03-96) which is obsolete.	(See reverse for instruct	COT 201 into	mation collection burden statement!

# Origin and Breeding History CX433RR

Soybean cultivar CX433RR has superior characteristics and is an F3 plant selection from the cross CX399 x BC2 of CX366 x 40-3-2. CX433RR was developed as follows:

Fall 1992

The cross CX366 x A5403-40-3-2 was made. A5403 is an Asgrow

variety that has had a gene inserted via transformation that confers resistance to the

herbicide glyphosate.

Winter 1993

Monsanto made BC1.

Summer 1993

Monsanto made BC2.

Winter 1994

CX399 was crossed with BC2 of CX366 x 40-3-2.

Summer 1994

Modified BC3F1 generation was grown.

Winter 1995

Modified BC3 F2 generation was grown.

Spring 1995

Modified BC3F3 generation was grown (rows 771-787).

Summer 1995

F4 generation was grown and selection '1' was harvested.

Winter 1996

The F5 of selection '1' was grown.

Summer 1996

The F6 and F7 seed were grown.

Winter 1997

F8 seed was grown.

Summer 1997

F9 seed was grown.

Summer 1998

F10 seed was grown

November 1998

The variety was commercially released as CX433RR.

# Statement of Stability and Uniformity

Soybean variety CX433RR has been judged to be uniform for breeding use and testing after four (4) generations of selfing. CX433RR was reproduced and judged uniform and stable for an additional six (6) generations.

### **Statement of Variants**

CX433RR shows no variants other than what would normally be expected due to environment or that would occur for almost any characteristic during the course of repeated sexual reproduction.

# **Novelty Statement**

DEKALB Genetics Corporation believes that CX433RR is most similar to soybean variety CX434 (PVP No. 9400027); however, CX433RR differs from this cultivar in the following trait: CX433RR has tan pods and is resistant to glyphosate whereas, CX434 has brown pods and is susceptible to glyphosate.

# **OBJECTIVE DESCRIPTION OF VARIETY**

**Soybean Variety CX433RR** Experimental Name: EX842RR

DEKALB Genetics Corporation 3100 Sycamore Road DeKalb, IL 60115	
	3100 Sycamore Road

1.	SEED SHAPE: (1) Spherical
<u>2.</u>	SEED COAT COLOR: (Mature Seed) (1) Yellow
<u>3.</u>	SEED COAT LUSTER: (Mature Hand Shelled Seed) (1) Dull
4.	SEED SIZE: (Mature Seed) 16.5g/100 seed
<u>5.</u>	HILUM COLOR: (Mature Seed) (6) Black
<u>6.</u>	COTYLEDON COLOR: (Mature Seed) (1) Yellow
7.	SEED PROTEIN PEROXIDASE ACTIVITY: (2) High
8.	SEED PROTEIN ELECTROPHORETIC BAND: -
9.	HYPOCOTYL COLOR: (3) Light Purple
10.	LEAFLET SHAPE: (3) Ovate
<u>11.</u>	FLOWER COLOR: (2) Purple
12.	POD COLOR: (1) Tan
<u>13.</u>	PLANT PUBESCENCE COLOR: (3) Tawny
14.	PLANT HABIT: (3) Indeterminate
<u>15.</u>	MATURITY GROUP: (7) IV
16.	MATURITY SUBGROUP: (2)

# **EXHIBIT C** CX433RR Page two.

### 17. **DISEASE REACTION:** (0=Not Tested; 1=Susceptible; 2=Resistant; 3=Tolerant)

# Bacterial Diseases:

0 **Bacterial Pustule:** Bacterial Blight: 0 WildfireBlight: 0

# Fungal Diseases:

Brown Spot: 0

Frogeye Leaf Spot

Race 1: 0 Race 2: 0 Race 3: 0 Race 4: 0 Race 5: 0 Race 6: 0

Other: 0

Target Spot: 0 Downy Mildew: 0 Powdery Mildew: 0

Brown Stem Rot:

Intermediate (DEKALB's score is 4; Rating scale 1-9: 1=resistant)

Stem Canker: Pod and Stem Blight: 0 Purple Seed Stain: 0 Rhizoctonia Root Rot: 0

Phytophthora Root Rot (2) Rps1c

Race 1: 0 Race 2: 0 Race 3: 0 Race 4: 0 Race 5: 0 Race 6: 0 Race 7: 0 Race 8: 0 Race 9: 0 Race 10: 0 Race 11: 0 Race 12: 0 Race 13: 0 Race 14: 0 Race 15: 0 Race 16: 0 Race 17: 0 Race 18: 0 Race 19: 0 Race 20: 0 Race 21: 0 Race 22: 0 Race 23: 0 Race 24: 0 Race 25: 0 Race 26: 0 Other: 0

## Viral Diseases:

Bud Blight: 0 Yellow Mosaic: 0 Cowpea Mosaic: 0 Pod Mottle: 0 Seed Mottle: 0

# **EXHIBIT C**

CX433RR Page three.

## Nematode Diseases:

Soybean Cyst Nematode (1)

Race 1: 0 Race 2: 0
Race 6: 0 Race 9: 0
Lance Nematode: 0
Southern Root Knot Nematode: 0

Southern Root Knot Nematode: 0
Northern Root Knot Nematode: 0
Peanut Root Knot Nematode: 0
Reniform Nematode: 0
Other: 0

Intermediate (DEKALB's score is 5; Rating scale 1-9: 1=resistant)

Race 14 (formerly Race 4): 0

Race 5: 0

Race 3: 0

# 20. PHYSIOLOGICAL RESPONSES:

Iron Chlorosis on Calcareous Soil:

Other:

# 21. <u>INSECT REACTION:</u>

Mexican Bean Beetle: 0
Potato Leaf Hopper: 0
Other: 0

# 22. HERBICIDE RESISTANCE:

Metribuzin: 0 Sulfonylurea: 0 Roundup: 3 Other: 0

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.  Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).			
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP				
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME		
DEKALB Genetics Corporation	EX842RR	CX433RR		
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (include area code)	6. FAX (include area code)		
3100 Sycamore Road DeKalb, IL 60115 U.S.A.	(815) 758-9281 (815) 758-4106  7. PVPO NUMBER 9900276			
8. Does the applicant own all rights to the variety? Mark an "X" in appropri	riate block. If no, please explain.	X YES NO		
9. Is the applicant (individual or company) a U.S. national or U.S. based company?  If no, give name of country    X YES   NO				
10. Is the applicant the original owner?  X YES N	O If no, please answer one of the fo	ollowing:		
a. If original rights to variety were owned by individual(s), is (are) the original	ginal owner(s) a U.S. national(s)?			
b. If original rights to variety were owned by a company(ice) in(an) the				
b. If original rights to variety were owned by a company(ies), is(are) the		<b>?</b>		
11. Additional explanation on ownership (if needed, use reverse for extra spa	ace):			
PLEASE NOTE:				
Plant variety protection can be afforded only to owners (not licensees) who meet one				
<ol> <li>If the rights to the variety are owned by the original breeder, that person must be a which affords similar protection to nationals of the U.S. for the same genus and sp</li> </ol>	a U.S. national, national of a UPOV member pecies.	•		
<ol> <li>If the rights to the variety are owned by the company which employed the original member country, or owned by nationals of a country which affords similar protect</li> </ol>	ion to nationals of the U.S. for the same ge	nus and species.		
3. If the applicant is an owner who is not the original owner, both the original owner				
The original breeder/owner may be the individual or company who directed final bree	the second of th	And the second of the second o		
According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection this information collection is 0581-0055. The time required to compete this information collection searching existing data sources, gathering and maintaining the data needed, and completing and revi	on of information unless it displays a valid OMB contra			

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